**When Solving MATHEMATICAL Problems**

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| 1. Read the question and ponder about **CREATING** a solution.  2. Develop a **STRATEGY** of what you are going to do to solve the problem.  3. **LOGICALLY** proceed through your strategy.  4. **COMMUNICATE** your solution using clear mathematical statements, words, equations and symbols.  5. **CRITICALLY** evaluate your findings and consider improvements. |

This procedure summarizes the thinking described in the NZC but is a path for learners to develop.

The literacy demands include reading, perhaps listening when getting the problem, researching (1). Then sketching, explaining, rewriting the problem (2). Using structure to record the solution (3). Writing, explaining, rewriting perhaps, talking, presenting, using symbols and mathematical statements (=)(4). Pondering and reflecting on the answer to develop a better or different solution.

The numeracy demands are within the problem but could include number operations on the Real Numbers, use of number lines, graphs, diagrams, shapes, statistics (means etc). Sense making of the solution and giving it appropriate context.

There is no time limit in solving a mathematical problem. An artificial limit may be imposed for management reasons but essentially a student should have as much time as required.

A final solution is to summarise all working and make a statement that solves the problem. Adding information or modifying a problem or generalizing a solution is ideal.

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